

### REMARKS

Claims 1-5, 7-12 and 14-17, as amended, remain in this application for the Examiner's review and consideration. The claims have been amended to more clearly define the scope of protection sought by the present application. In particular, claims 1 and 9 have been amended to recite that in-links associated with each search result in the section portion of the search results are identified, that a time-based weight is associated with each identified in-link using at least one of a creation time and a publication date for an in-linking source containing that in-link, that an aging factor is assigned to each time-based weight and that the second portion of the initial set of search results is ranked using the time-based weights and assigned aging factors. Claim 15 has been amended to recite that the temporally ranked list of search results uses a time-based weight and aging factor. Claims 3 and 10 have been amended to recite that the aging factor is an exponential decay rate. Claims 4 and 11 have been amended to recite that assigning the aging factor includes using in-links from in-linking sources associated with a newer group of the identified in-links associated with the second portion of the search results to in-linking sources associated with an older group of the identified links associated with the second portion of the search results to determine the aging factor. Support for these amendments can be found in the specification as originally filed, in particular on page 7, line 22 to page 8, line 3, page 9, lines 14-16 and lines 23-25 and page 10. As these amendments do not introduce any new matter into the above identified application, their entry at this time is warranted.

Claims 1-5, 7-12 and 14-17 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Application Publication No. US2003/0135490 to Barrett et al. ("Barrett") in view of U.S. Patent Application Publication No. US2005/0071741 to Acharya et al. ("Acharya") for the reasons stated in paragraph 5 of the Office Action. It was asserted that Barrett discloses all of the elements of the present invention as currently recited in the claims except ranking based on in-links. Acharya was said to teach ranking search results based on in-links. Applicant asserts that this rejection has been overcome for the reasons that follow.

Barrett is directed to an enhanced popularity ranking in which the search activities of previous users are monitored, and this activity is used to organize information for future users. The user activities are monitored from a time and use based perspective. The basic technique of

Barrett is to utilize the time history of uses of information. Therefore a popularity ranking is used based upon timing of previous uses. Acharya is directed to information retrieval systems in which link-based criteria may be used to generate a score associated with a document. These criteria include an age distribution associated with links pointing to a document, dates when links appear, dates when links disappear and the “dynamicness” of the links, among other factors.

In contrast, methods for ranking results in accordance with the present invention and as currently recited claims 1, 9 and 15, the only independent claims, are based upon in-links associated only with search results having creation dates before a pre-determined threshold date. A time-based weight is associated with each identified in-link using either the creation time, the publication date or both the creation time and a publication date for the in-linking source containing that in-link. In addition, an aging factor is assigned to each time-based weight and is used in combination with the time-based weights to rank the second portion of the initial set of search results. The time-based weights and aging factors provide an indication of the current and future quality of sources that link to a given document and are used to determine the weight or relevance of document in response a query. As stated in the specification, “the age or date of a given result . . . can be based on . . . the dates on which the result is referenced or linked to by others, i.e., the dates that each in-link is created” page 8, lines 26-29. Since higher quality resources will have more overall in-links and recent as well as older in-links, an evaluation of the age of in-links provides an assessment of the quality of a given search result. In addition, source documents containing the in-links that are newer and that retain their relevance for longer periods of time lend increased weight to the documents to which they link.

The time history of uses in Barrett is not in-link data and does not utilize the existence or age of in-links to a given search result. The history of uses is based upon how often, when and for how long a given result or webpage is viewed. As currently recited in claims 1 and 9, an initial set of search results is generated, and two portions of this set of search results are identified, a first portion and a second portion based upon the creation dates of each result. The first portion of the initial search results has creation dates after a pre-determined threshold date, and the second portion of the initial search results has creation dates before the pre-determined threshold date. The second portion results, i.e. the results having creation dates before the

threshold date, are ranked based on the time based weights and aging factors of the in-links. There is no teaching or suggestion in Barrett of making any rankings based upon in-link data. Moreover, Barrett fails to teach or disclose first sorting search results into two groups based upon age followed by ranking the search results based on in-link data. Although Acharya teaches the use of in-links to score documents, Acharya fails to teach or disclose the use of a time based weight for each in-link based on the creation or publication date of the underlying source document containing the link in combination with an aging factor for the time-based weight to rank a portion of the search results having a creation date before a threshold date.

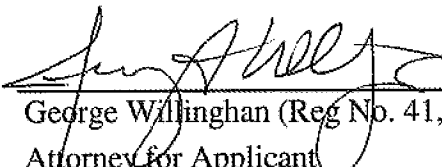
All of the remaining claims depend either directly or indirectly from claims 1, 9 and 15 and contain additional recitations that further define the present invention over Barrett and Acharya. For example, claims 3 and 10 recite that the aging factor is an exponential decay rate. Claims 4 and 11 recite that in-links from in-linking sources associated with a newer group of the identified in-links associated with the second portion of the search results to in-linking sources associated with an older group of the identified links associated with the second portion of the search results to determine the aging factor. That is links from newer sources containing in-links to older sources containing in-links is used to calculate an aging factor for in-links. Since Barrett in combination with Acharya fails to disclose or teach all of the recitations of the claims as presently amended, the present rejection has been overcome and should be withdrawn.

Applicant asserts that all claims are now in condition for allowance, early notification of which is respectfully requested. As the present amendments do not introduce any new claims above the original number of filed claims, no fees are believed due for the submission of this amendment. No other fees are believed due.

Respectfully submitted,

Date November 9, 2007

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